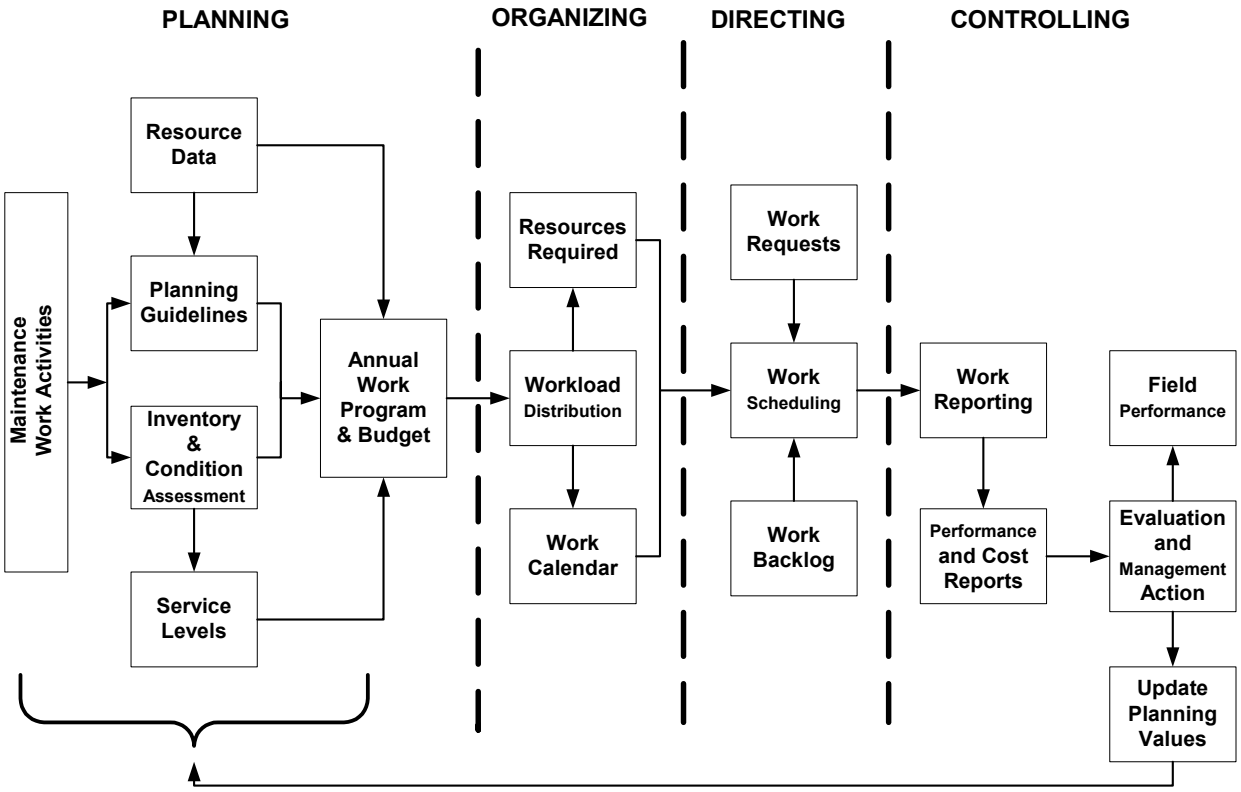
The flow of information throughout the maintenance management process provides another, yet more detailed, view of a formalized maintenance program:



The above information flow depicts the primary elements and sub-elements of a formalized maintenance management system (MMS). Maintenance management systems are used by public works directors and field managers to plan, organize, schedule, control and evaluate road maintenance programs. With maintenance responsibilities involving many miles of roads, many employees and often millions of dollars, the management requirements are complex and require consistent procedures to ensure the success of a maintenance program.

Essentially, maintenance management systems are orderly processes for recording, analyzing and displaying information about the road system, the work performed in maintaining the system and the resulting costs and condition of the system. For small operations, manual recording and analysis may be a suitable means of operating the system, though with availability of microcomputers, almost all agencies can benefit from the use of electronic data processing for management systems.

Regardless of the way in which the data is processed, the concepts of a maintenance management system remain the same. The basic components of maintenance management systems developed and generally accepted by road maintenance organizations include:

- The development of performance standards for principal maintenance activities describing the procedures to be followed, the labor, equipment and materials to be used and the rate of production to be achieved.

- The determination of workloads through the measurement of quantities of the various elements of the road system (system inventory) and the evaluation of external influences (such as weather and traffic) acting upon these elements which create a need for maintenance.

- The budgeting (dollars) of resources (labor, equipment, materials) to meet the predicted workload in terms of specific programs (activities, quantities, locations) to be achieved.